I CLAIM:

1. A water activated release mechanism comprising:

a first probe exposed to the environment;

a second probe exposed to the environment;

at least one first battery electronically connected between the first probe and a first node;

at least one second battery electronically connected between the second probe and a second node; and

a squib electrically connected between the first node and the second node.

2. The mechanism of Claim 1 further including:

a capacitance C electrically connected between the first node and the second node;

a resistance R1 electrically connected between the first node and the second node;

a voltage Vc across the capacitance C;

a switch between the squib and one of the first node and the second node; and

means for closing the switch if the voltage Vc is at least a threshold voltage Vt.

3. The mechanism of Claim 2 wherein the capacitance C comprises at least an approximately 2.7 m Farad capacitance.

4. The mechanism of Claim 3 wherein the at least an approximately 2.7 m Farad capacitance comprises six approximately 0.45 m Farad capacitors, and wherein the resistance R1 comprises an approximately 150 ohm thermistor having a negative temperature coefficient, in series with an approximately 350 ohm resister.

5. The mechanism of Claim 2 wherein the at least one first battery and the at least one second battery are electrically connected to produce a positive voltage at the first node, and wherein the switch closing means comprises:

a diode connected between the first node and the second node;

a cathode terminal of the diode electrically connected to the first node;

an anode terminal of the diode electrically connected to the second node;

a third node electrically connected between the anode terminal and the second node;

a second resister electrically connected between the third node and the second node; and

a lead electrically connected between the third node and a control gate on the switch, wherein the switch is normally open, and is adapted to close when the diode conducts.

6. The mechanism of Claim 5 wherein the second resister is at least approximately a 10,000 ohm resister.

7. The mechanism of Claim 5 wherein the diode is a zener diode.

8. The mechanism of Claim 2 wherein the switch comprises a Silicon Controlled Rectifier (SCR).

9. The mechanism of Claim 2 wherein the at least one first battery comprises two 6 volt batteries and the at least one second battery comprises two 6 volt batteries.

10. The mechanism of Claim 2 wherein the squib comprises a minimum force of approximately 100 lbs and a stroke of approximately .25 inches

11. The mechanism of Claim 2 wherein the squib is adapted to provide force and distance sufficient to release the buckle.

12. The mechanism of Claim 2 wherein the squib is in thermal cooperation with a heat sink.

13. A water activated release mechanism comprising:

a first probe exposed to the environment;

a second probe exposed to the environment;

at least one battery electronically connected between one of the set consisting of the first probe and a first node, and the second probe and a second node, wherein the at least one battery is electrically connected to produce a positive voltage at the first node;

a squib and a switch serially electrically connected between the first node and the second node;

a capacitance C electrically connected between the first node and the second node;

a diode having a cathode terminal and an anode terminal, wherein the cathode terminal is electrically connected to the first node and the anode terminal is electrically connected to the second node;

a third node electrically connected between the anode terminal and the second node;

a second resister electrically connected between the third node and the second node; and

a lead electrically connecting the third node to a control gate of the switch.

14. The mechanism of Claim 14 wherein the at least one battery comprises at least one first battery electronically connected between the first probe and a first node and at least one second battery electronically connected between the second probe and a second node.

15. The mechanism of Claim 14 wherein the switch comprises a Silicon Controlled Rectifier (SCR).

16. The mechanism of Claim 14 wherein the capacitance C comprises six approximately 0.45 m Farad capacitors.

17. A method for activating a release mechanism, comprising:

closing a circuit between a first probe and a second probe;

creating a positive voltage at a first node from at least one of a first battery electrically connected between the first probe and the first node, and a second battery electrically connected between a second node and the second probe;

charging a capacitor electrically connected between the first node and the second node;

exceeding a breakdown voltage of a diode having a cathode terminal electrically connected to the first node, and an anode terminal electrically connected to a control gate of a normally open switch, wherein the switch and a squib are serially electrically connected between the first node and the second node;

closing the switch;

providing between approximately 550,000 and approximately 5,000,000 ergs of energy to the squib; and

firing the squib.

18. The method of Claim 18, wherein charging a capacitor comprises charging six approximately 0.45 m Farad capacitors.

19. The method of Claim 18, wherein closing the switch comprises providing a voltage to a Silicon Controlled Rectifier (SCR) serially electrically connected with the squib between the first node and the second node.